



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Region 6**

**1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733**

February 19, 2013

U.S. Army Corps of Engineers  
New Orleans District  
Attention: Nathan Dayan  
P.O. Box 60267  
New Orleans, LA 70160-0267

Dear Mr. Dayan,

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Revised Programmatic Environmental Impact Statement (DRPEIS) prepared by the U.S. Army Corps of Engineers (USACE). The USACE proposes to make changes and improvements in the planning, design, construction, operation, and maintenance of the Morganza to the Gulf hurricane and storm damage risk reduction system project to prevent future disasters to the greatest extent possible.

EPA rates the DRPEIS as “**EO-2**” i.e., EPA has “identified significant environmental impacts and we request additional information in the Final RPEIS (FRPEIS)”. The EPA’s Rating System Criteria can be found here: <http://www.epa.gov/oecaerth/nepa/comments/ratings.html>. The “EO” rating is based on the potential for significant adverse impacts to environmental justice communities, tribal communities, and coastal wetlands. These significant adverse impacts include the direct, indirect, and cumulative effects of the proposed project. The “2” indicates the DRPEIS does not contain sufficient information to fully assess direct, indirect, and cumulative impacts to environmental justice communities, identified Tribes, and coastal wetlands. Detailed comments are enclosed with this letter which identifies our concerns and informational needs requested for incorporation into the FRPEIS.

EPA appreciates the opportunity to review the DRPEIS. Please send our office one copy of the FRPEIS and an internet link or CD when it is sent to the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Federal Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20004. Our classification will be published on the EPA website, <http://www.epa.gov/compliance/nepa/comments/ratings.html>, according to our responsibility under Section 309 of the CAA to inform the public of our views on the proposed Federal action.

If you have any questions or concerns, please contact me at 214-665-8126 or John MacFarlane of my staff at [macfarlane.john@epa.gov](mailto:macfarlane.john@epa.gov) or 214-665-7491 for assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Debra A. Griffin". The signature is fluid and cursive, with the first name "Debra" being more prominent than the last name "Griffin".

Debra A. Griffin  
Associate Director  
Compliance Assurance and  
Enforcement Division

Enclosure

**DETAILED COMMENTS ON THE  
U.S. ARMY USACE OF ENGINEERS'  
DRAFT REVISED PROGRAMMATIC  
ENVIRONMENTAL IMPACT STATEMENT  
FOR THE  
MORGANZA TO THE GULF OF MEXICO PROJECT  
TERREBONNE AND LAFOURCHE PARISH, LOUISIANA**

**BACKGROUND:** The U.S. Army Corps of Engineers (USACE) proposes to make changes and improvements in the planning, design, construction, operation, and maintenance of the Morganza to the Gulf hurricane and storm damage risk reduction system project to prevent future disasters to the greatest extent possible. The purpose of this project is to reduce the risk of damage caused by hurricane storm surges.

**GENERAL COMMENTS:**

The Environmental Protection Agency (EPA) has identified known environmental justice (EJ) communities and areas within the study area. The communities of Isle de Jean Charles and Point au Chien are associated with state-recognized tribes, where a large percentage of the population is minority and financially disadvantaged. Additionally, there are several communities of special concern outside of the proposed levee system. These communities include, but may not be limited to, Gibson, Bayou Dularge, Dulac, and Cocodrie.

The Isle de Jean Charles community has been previously identified as an EJ community with significant EJ concerns. Because of their special vulnerability, the proposed action, directly or indirectly, is likely to have disproportionate impacts on the Isle de Jean Charles community. Additional tribal communities could be similarly impacted due to effects on subsistence activities or cultural integrity, but are not mentioned in the Draft Revised Programmatic Environmental Impact Statement (DRPEIS), such as the Point au Chien Indian Tribe and United Houma Nation. The residents of these communities, and possibly other communities, are likely dependent, directly or indirectly, through their family or income sources, upon harvests of aquatic life for subsistence and livelihood.

In view of these special circumstances, EPA recommends that the USACE perform an appropriately detailed EJ analysis, immediately begin additional outreach and public involvement, consider alternatives to a buyout, and provide a detailed analysis of how buyout alternatives would avoid additional or cumulative, disproportionate impacts on EJ areas and communities.

In accordance with Executive Order (E.O.) 13175 and applicable federal laws and policies, all federally recognized tribes that may be affected by the proposed project through potential impacts upon their citizens, resources, lands, culture, or traditional lifeways, should be identified and offered formal government to government consultation. Compliance with E.O. 13175 was not documented in the DRPEIS. If this consultation has not been done, the USACE should immediately contact the Chitimacha Tribe of Louisiana and other federally

recognized tribes for both government-to-government (E.O. 13175) and National Historic Preservation Act (NHPA) consultation. Although the USACE is not required to contact state-recognized tribes for consultation under E.O. 13175, the EPA encourages the USACE to engage these and other stakeholders, especially since these communities are already overburdened and may have additional cultural sites of interest.

Utilizing information obtained through coordination with residents, stakeholders, and consultation with federally recognized tribes, the USACE should develop and refine its preliminary buyout plan. Buyout options should include relocation of intact communities where the potential for irreparable harm exists for unique cultures, languages, and traditions that may be lost if the community is broken up, such as in the case of the Isle de Jean Charles. The USACE should provide a schedule and detailed information for the proposed sequence of construction and buyout alternatives.

Approximately 85 miles of this proposed 98-mile levee system would be built on or adjacent to existing hydrologic barriers, including natural ridges, roads, and existing levees. This helps minimize the potential for indirect adverse impacts to wetlands and other aquatic resources. Nevertheless, tens of thousands of acres of wetlands and open waters would be enclosed within the levee system, and thus could be indirectly affected. In addition to avoiding and minimizing direct wetland impacts, the design and implementation of this levee system must focus on the larger and more complex challenge of minimizing indirect impacts to these valuable aquatic resources.

The USACE is planning to minimize adverse indirect impacts from this project by designing gates and water control structures to allow sufficient ingress and egress of aquatic organisms and to reduce wetland degradation due to prolonged impoundment and/or other hydrologic changes. To that end, the gates and water control structures in the levee system are intended to remain open except when the project area is threatened by a storm surge. In the long term, however, subsidence combined with sea level rise will likely lead to a significant increase in the frequency of closure of these gates and water control structures. For example, the Draft Post Authorization Change (PAC) Report and DRPEIS state that by the year 2085, the Houma Navigation Canal floodgate could be closed between 168 and 365 days per year, depending on the assumed rate of relative sea level rise. Such increased closure could significantly impact wetlands, water quality, fisheries, and navigation – and would in effect be a profound deviation from the design intent of this levee system. What is proposed as an open levee system would increasingly become a closed one, with potentially significant socioeconomic and environmental consequences.

The potential for increased frequency of gate and water control structure closure appears to be a major long-term environmental and socioeconomic risk of this proposed levee system. The Final Revised PEIS (FRPEIS) should ensure that the public and decision-makers are adequately apprised of this risk. The potential adverse environmental and socioeconomic impacts of increased structure closure should be assessed in the section on environmental consequences. Given the long-term and potentially significant ramifications of this issue, we would also recommend that it be highlighted in the summary sections of both documents. The FRPEIS should also provide more detail on ways this challenge might be addressed in the future.

For example, the Draft PAC Report discusses the possibility of converting the proposed gates to locks and installing “additional pumps behind the levee system”. Does this suggest that portions of the proposed project could be converted to forced drainage? Finally, the USACE should consider discussing this issue in the FRPEIS section regarding “unresolved issues”, as there does not appear to be a clear path forward identified for addressing this concern and ensuring adequate hydrology and navigation in the long term.

Reducing flood risk in the study area is certainly in the public interest. For such benefits to be realized, the public must fully understand the level of risk reduction afforded by the proposed project. It would be counterproductive if construction of the proposed project were to provide residents of the area with a false sense of security, thereby possibly affecting evacuation rates and/or decisions regarding how and where to build homes and businesses. As part of its ongoing work on this project, the USACE should endeavor to ensure that residents in the area understand the residual flood risk that would remain while the project is being constructed and when it is complete, and work to ensure that flood risk in the area does not increase as a result of further development in high risk areas.

Following are detailed comments and recommendations pertaining to specific portions of the DRPEIS and Draft PAC Report. We thank the USACE for its ongoing coordination with EPA on this important matter and for its consideration of these recommendations. We remain committed to working with the USACE and other stakeholders to address these matters as expeditiously as possible.

## **DETAILED COMMENTS:**

### 3.7.2 Wetland Loss, page 3-12

This section states “Principal impacts to the marshes in the study area are due to storm surge and associated erosion and saltwater intrusion.” No mention is made to the many miles of oil and gas canals and navigation channels which allow for increased saltwater intrusion, while also disrupting natural surface hydrology throughout the study area. As currently worded, this section could suggest to the reader that the severe wetland loss in the study area is solely a natural phenomenon.

## **Recommendation:**

This section should be revised to include all actions, past and present, that have led to coastal wetland loss. These actions include oil and gas extraction, pipeline canals, navigational projects, commercial and residential development, and global sea level rise.

### 3.8.2 Coastal Restoration Opportunities, page 3-13

The Draft PAC Report and DRPEIS state that the proposed levee system “would complement state and Federal coastal restoration projects” by providing protection against coastal erosion and the adverse effects of storm surge (Draft PAC Report, pages ix and 60; DRPEIS, Abstract-i). We recognize that aspects of this system may have the potential to provide

environmental benefits, particularly the proposed lock on the Houma Navigation Canal. As discussed above, however, the proposed levee system could also result in long-term negative environmental effects which could be counter to coastal restoration goals. In particular, relative sea level rise would likely result in an increase in the frequency of closure of the system's floodgates and water control structures, potentially reducing ingress and egress of aquatic organisms, increasing impoundment of enclosed wetlands, harming water quality, and interfering with navigation and commerce.

### **Recommendation:**

Although the full extent of such negative impacts has not been adequately assessed, statements regarding the net indirect environmental effects of this levee system should at a minimum indicate that there is the potential for negative effects in the future – effects which might outweigh any potential near-term environmental benefits.

## **4. ALTERNATIVES**

### 4.3.7 Induced Flooding Impacts, page 4-20 and 6.14.1 Population and Housing, page 6-33

Section 4.3.7 discusses “constructible features” and “programmatic project features” of the overall levee system. The document is intended to provide sufficient detail such that no further NEPA documentation is needed for the constructible features, whereas the programmatic project features would require further NEPA analysis at some later date. Hydrologic modeling indicates that the proposed levee system could potentially increase storm surge flooding in areas outside of the levee. For this reason, the DRPEIS, Draft PAC Report, and the Real Estate Plan discuss a preliminary nonstructural buyout plan for approximately 1,000 structures and 2,500 people potentially affected by induced surge.

This preliminary buyout plan does not appear to be a constructible feature – meaning that further analysis would be needed before it could be implemented. In addition, the Real Estate Plan states on page 20 “Relocations will be accomplished in phases along with project construction...” and calculates 15 year time frame for property acquisition. This raises the question as to whether implementation of the constructible levee features could increase flood risks outside the levee system prior to implementation of a buyout program or some other non-structural response. If portions of the levee are built prior to addressing the risks associated with induced surge, then people and properties, including EJ communities, outside of the levee system are potentially exposed to increased flood risk, with no certainty as to whether or when a non-structural risk reduction program would actually be implemented. This has the potential to create a direct disproportionate impact on EJ communities.

### **Recommendation:**

EPA recommends the USACE assess whether implementation of the constructible features would result in increased surge risk to properties and people outside the proposed levee system. If so, we recommend that the FRPEIS include as constructible features those non-

structural measures needed to address such increased risk and assess this disproportionate impact in the EJ analysis.

## **5. AFFECTED ENVIROMENT**

### 5.2.9 Air Quality, page 5-38

This section discusses the nonattainment/maintenance history of Lafourche Parish for both the 1-hour ozone and 8-hour ozone National Ambient Air Quality Standards (NAAQS). It is correctly noted that Lafourche Parish has an EPA-approved 110(a)(1) maintenance plan for ozone.

#### **Recommendation:**

Please include a discussion to clarify that 110(a)(1) maintenance areas are not subject to the air quality conformity requirements of Clean Air Act Section 176(c). Also include the distinction that EPA's March 24, 2008 approval of the Lafourche Parish 110(a)(1) maintenance plan pertains to the 1997 8-hour ozone NAAQS. EPA completed the designations process under the 2008 8-hour ozone NAAQS on April 30, 2012 (77 FR 30088), and Lafourche Parish was designated as unclassifiable/attainment for this standard.

### 5.2.13 Socioeconomics

The location of the proposed project occurs in EPA-identified EJ areas, including Isle de Jean Charles. The EJ assessment for the DRPEIS is inadequate, provides little detail, and has no in-depth analysis. The DRPEIS fails to identify with any specificity, the communities that are likely to be impacted or their characteristics, and it fails to identify particular minorities or ethnic groups impacted.

#### **Recommendation:**

The FRPEIS should include a detailed socioeconomic analysis for potential EJ impacts comparing the demographics and potential environmental impact of those inside the levees with those who are outside the system. In addition, the USACE should consider the potential impacts of increased storm surge and flooding due to the timing of levee construction in the EJ analysis.

### *Community Cohesion, page 5-47*

The discussion of "community cohesion" is inadequate in that it fails to identify, discuss, or address unique community attributes associated with tribes, such as language, culture, religion, tradition, governance, and other necessary attributes for continuing survival of a tribe or band of Indians, some of which are known to reside in this area (for example the Isle de Jean Charles band of Biloxi-Chitimacha, Point au Chien Indian Tribe, and United Houma Nation). If these attributes are not identified, then it is not possible to consider direct, indirect, or cumulative impacts of the alternatives on these communities. It is well known that intrusion by non-natives into traditional communities can lead to erosion of tradition and loss of language. If a traditional

community is physically relocated, impacts will be even more severe. If a traditional community is split up, the culture, language, and traditions are most likely going to be irretrievably lost.

**Recommendation:**

The USACE should develop additional alternatives for residents that are outside the proposed levee system (e.g., Isle de Jean Charles). This should include the buyouts as stated in the DRPEIS, but should also include non buyout alternatives like ring levees, house elevation, etc. Alternatives should recognize and protect the uniqueness of the Isle de Jean Charles community and maximize community cohesion by developing alternatives that have a concerted effort to protect, buyout, or move Isle de Jean Charles residents as an intact community. USACE should also determine whether the Point au Chien Indian Tribe and United Houma Nation would experience similar potential impacts.

*Environmental Justice, page 5-48*

Page 5-48 states “For purposes of this analysis, all census tracts within the project footprint are defined as the EJ study area. Lafourche Parish and Terrebonne Parish are considered as reference communities of comparison.” It is unclear why U.S. Census Bureau Census Tracts were used as base assessment units instead of smaller geographic units such as Census Block Groups. There are fourteen Census Tracts that were the basis of the EJ assessment. Of these fourteen, five were considered low income by the USACE, approximately 35.7% of the tracts. The USACE states that the tracts considered low income are not within the path of levee construction, are sparsely populated, or are similarly affected and therefore, there are no potential EJ impacts. EPA is concerned that the geographic unit selected for analysis does not accurately reflect the demographics of the area, and in particular the poverty level. There are 142 Block Groups within the two parishes identified for this project. Of those 142 Block Groups, 119 Block Groups, or 83.8%, meet the definition of low income/poverty as stated in the DRPEIS. Additionally, 39.4% of the Block Groups in the project area fall within the census definition of “extremely low income,” that is, Block Groups that are greater than 40% low income.

**Recommendation:**

The USACE should use Census Block Groups or a geographic unit smaller than Tracts, to perform socioeconomic and EJ assessments in order to obtain a more accurate estimate of the demographics of the area and thus a more accurate depiction of the potential impacts of the proposed project. The USACE should discuss its rationale for the criteria used (e.g., 50% minority, etc.). A more in-depth analysis is needed in order to describe the minority make-up of the communities (e.g, Asian, Native American, etc.) and analyze the potential impacts of the proposed project that may affect each ethnic group differently.

*Environmental Justice, page 5-48*

Page 5-48 also states “All residents, irrespective of minority status or income level, are expected to be similarly impacted by construction activities.” EPA strongly disagrees with this

statement since the USACE did not compare residents inside the proposed levee system with residents outside the levee system and how they may be potentially impacted by the timing of construction and the lack of details concerning the buyout.

**Recommendation:**

The USACE should perform an EJ analysis characterizing and comparing these two populations. The DRPEIS should provide a similar level of detail on the buyout activities as it does for the engineering and economic aspects of levee construction.

*Tribal Issues, page 5-49*

It is stated on page 5-49 “Additionally, approximately 230 members of the state recognized Biloxi-Chitimacha tribe are located on Isle de Jean Charles, which is outside of the southern boundary of the project alignment in Terrebonne Parish. While this raises a potential EJ issue, with respect to alternative protection alignments, neither of the alternatives to the No Action Alternative authorized for study under the PAC represents a separate alignment that includes this community. Providing hurricane risk reduction for these residents has been determined in previous Corps of Engineers analyses to be cost prohibitive.” The DRPEIS does not reflect any attempt by the USACE to contact the Biloxi-Chitimacha tribe as an interested stakeholder. This Tribe has lived in this area for over 130 years and they have lost most of their land through a history of war, disease, displacement and poverty, erosion, and past governmental decisions. They are very much in danger of losing their “community cohesion,” including their language, culture, and traditions. EPA is concerned that this “potential EJ issue” has not been analyzed in detail as several of our comments suggest. In addition, it is unclear whether the USACE contacted the federally-recognized Chitimacha Tribe of Louisiana regarding cultural resources in southern Louisiana or whether the USACE contacted them under E.O. 13175 for government-to-government consultation.

The USACE does not describe when it determined that hurricane risk reduction for the residents of Isle de Jean Charles was cost prohibitive and whether options other than buyouts were developed or considered.

**Recommendation:**

The USACE should directly contact the Chief of the Isle de Jean Charles Band of the Biloxi-Chitimacha-Choctaw Indians, the Point au Chien Indian Tribe, and United Houma Nation, and appropriate residents of these communities, so they can have meaningful participation in the NEPA and buyout processes. Given the remote and rural nature of these locations, solely advertising a public meeting in the Houma newspaper is inadequate. A more concerted effort to contact individuals in these communities is necessary because people may not speak English, receive local newspapers, and/or may have a fear of governmental authorities.

## 6. ENVIRONMENTAL CONSEQUENCES

### General Comments

EPA believes that a majority of the resources were not properly evaluated for their environmental consequences. In most cases, impacts are stated in generalities and only the magnitude (the amount of change) is specified. However, the extent (how vast is the change), direction (how dynamic is the change), duration (how lasting is the change), and speed (how rapid is the change) of the impact should be disclosed as well. Otherwise stated, the Environmental Consequences chapter should discuss and analyze how and why the proposed project affects the overall health of the resources within the study area.

### Indirect Impacts

EPA believes that the indirect impacts analysis has not fully disclosed the entirety of indirect impacts. The following are examples of how the indirect impacts analysis should be strengthened.

The Draft PAC Report asserts that the proposed environmental control structures in the levee system “mitigate for indirect impacts of the levee system by matching and/or enhancing existing drainage patterns during non-storm conditions” (Draft PAC Report, page ii). This statement should be amended to account for the potential long-term indirect impacts associated with the projected increase in the closure frequency of the system’s gates and water control structures.

The Draft PAC Report states on page 83 that “The Habitat Evaluation Team determined that no indirect impacts to wetlands would result from the project.” A similar statement is made on page 6-62 of the DRPEIS. EPA takes issue with this assertion. While potential near-term hydrologic effects of the levee system could theoretically be negligible, the USACE’s own analysis regarding the frequency of gate and water control structure closure in the future strongly suggests that the project could result in significant long-term adverse impacts to wetlands, water quality, and fisheries (along with navigation).

The last sentence on page 19 of Appendix C states that “...the project would not induce significant changes on the hydrology of the estuary.” It is not clear how this could be consistent with the USACE’s projections regarding increased closure frequency of gates and water control structures in the long-term. While this section does discuss the possibility that the sponsor might wish to modify the closure criteria to address non-storm water stages, there is no discussion of the potentially significant changes in circulation that could occur with the increased closure frequency projected using the current closure criteria. As with other portions of the DRPEIS, EPA recommends the USACE describe the potential indirect impacts that could occur due to increased closure frequency of gates and water control structures due to relative sea level rise, with the focus in this section being on estuarine flow and current patterns.

The discussion of cumulative effects on the aquatic ecosystem on page 37 of Appendix C states that “No long-term, negative cumulative impacts are anticipated.” Here again, it is unclear

how the projections regarding future frequency of gate and structure closure could support such a conclusion.

### **Recommendation:**

The FRPEIS should include a comprehensive indirect impacts analysis and fully disclose all effects caused by the action that occur later in time or are farther removed in distance.

### Cumulative Impacts

Due to the expansive nature of this project and the environmental sensitivity of the study area, EPA believes a more comprehensive and wide-ranging cumulative impacts analysis should be completed. The purpose of a cumulative impacts analysis is to ensure federal decisions consider the full range of consequences of actions. Without a thorough cumulative impacts analysis, the full range of environmental consequences is impossible to quantify. The study area is an ecologically sensitive area that is rapidly degrading. Past actions such as oil and gas extraction, including pipeline canals, navigational projects, federal and local levee construction, and industrial, commercial, and residential development, along with storm surge, have led to the degradation of coastal wetlands. These same actions would continue the alteration of the natural hydrology, leading to additional coastal wetland loss. Future projects, such as the Houma Navigation Canal project, Coastal Impact Assistance Program projects, Louisiana Coastal Area Plan projects, and Coastal Wetlands Planning, Protection, and Restoration Act projects, along with the actions listed above, should be analyzed for their potential impacts to coastal Louisiana. In addition, the global issue of sea level rise should be incorporated into this discussion.

### **Recommendation:**

The FRPEIS should include a comprehensive cumulative impacts analysis by establishing spatial and temporal boundaries for significant resources and including a list and description of past, present, and reasonably foreseeable future projects. An attempt was made to establish boundaries and list projects; however, much more detail is required. The analysis should include the overall impacts to the environment that can be expected if the individual projects and their impacts, including the proposed project, are allowed to accumulate.

We refer you to the Council on Environmental Quality's "Considering Cumulative Effects Under the National Environmental Policy Act" and EPA's "Consideration Of Cumulative Impacts In EPA Review of NEPA Documents" for assistance with writing a more comprehensive cumulative impacts analysis.

### 6.2 Coastal Vegetation and Wetlands

Table 6-1 of the DRPEIS indicates that, assuming intermediate sea level rise, a total of 670 and 3,443 acres of wetlands would be directly impacted by the constructible and programmatic features, respectively. In the same table, there appears to be an error in the calculation of total wetland impacts, which is currently listed at 2,993 acres, again assuming intermediate sea level rise. These direct wetland impact numbers are inconsistent with those

provided in Appendix C, which on pages 4 and 5 indicates that the constructible features would result in direct impacts to 721 acres of marsh. Page 35 of the same appendix contains a table showing 4,104 acres of wetland impacts from the programmatic features. These numbers should be reconciled in the FRPEIS.

### *Borrow Sources*

According to Appendix C of the DRPEIS, borrow material for the proposed project would come from a combination of adjacent and offsite borrow locations. The appendix states that offsite borrow sources would not come from wetland areas, but provides no such commitment with respect to adjacent borrow sources. Indeed, it appears from the figures in Appendix G that some portion of the borrow material for the constructible and programmatic levee features would come from adjacent wetlands.

In order to comply with the Clean Water Act Section 404(b)(1) Guidelines, the USACE would need to demonstrate that there is no less environmentally damaging practicable alternative to using wetlands as a source of borrow material. Page 38 of Appendix C indicates that no less environmentally damaging practicable alternatives to the proposed discharges could be identified. However, there does not appear to be any information to adequately substantiate this claim with respect to the analysis of potentially less environmentally damaging borrow sites. The FRPEIS should include information demonstrating that there are no less environmentally damaging borrow sources for the constructible levee reaches. This same analysis of borrow site alternatives would also be needed for subsequent environmental reviews of the programmatic features. On this point, we would note that the avoidance of jurisdictional wetlands for borrow material is one of the significant environmental accomplishments of the expedited NEPA process for the Greater New Orleans Hurricane and Storm Damage Risk Reduction System. We would encourage the USACE to work to repeat this important precedent.

### 6.10.2 Air Quality - Action Alternatives, page 6-26

This section states that direct project impacts to ambient air quality will be temporary and localized, primarily due to construction equipment emissions and airborne particulate matter/fugitive dust.

### **Recommendation:**

In addition to all applicable local, state, or federal requirements, the following mitigation measures should be included in a construction emissions mitigation plan or similar document in order to reduce air quality impacts associated with emissions of NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and other pollutants from construction-related activities:

#### Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate at active and inactive sites during workdays, weekends, holidays, and windy conditions;

- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions; and
- Prevent spillage when hauling material and operating non-earthmoving equipment and limit speeds to 15 miles per hour. Limit speed of earth-moving equipment to 10 mph.

#### Mobile and Stationary Source Controls:

- Plan construction scheduling to minimize vehicle trips;
- Limit idling of heavy equipment to less than 5 minutes and verify through unscheduled inspections;
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, prevent tampering, and conduct unscheduled inspections to ensure these measures are followed;
- If practicable, utilize new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, commit to the best available emissions control technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible;
- Lacking availability of non-road construction equipment that meets Tier 4 engine standards, the responsible agency should commit to using EPA-verified particulate traps, oxidation catalysts and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site; and
- Consider alternative fuels and energy sources such as natural gas and electricity (plug-in or battery).

#### Administrative Controls:

- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking;
- Develop a construction traffic and parking management plan that maintains traffic flow and plan construction to minimize vehicle trips; and
- Identify sensitive receptors in the project area, such as children, elderly, and infirmed, and specify the means by which impacts to these populations will be minimized (e.g. locate construction equipment and staging zones away from sensitive receptors and building air intakes).

#### 6.14.8 Environmental Justice, page 6-41

Page 6-41 states "we have determined that there is no disproportionate impact to a minority or low income community."

EPA strongly disagrees with this statement. There is not adequate information in the DRPEIS to determine how the USACE came to the conclusion that there are no potentially disproportionate impacts to minority and/or low income communities. When one segment of the population benefits from the proposed action, but another absorbs the negative impacts of the action (i.e., increased storm surge and flooding as levee segments are constructed) in addition to historical actions/events (i.e. an already overburdened community), it can create a potentially disproportionate EJ impact. The USACE did not perform an adequate EJ assessment 1) comparing the potential impacts of those inside and outside the levees and 2) comparing the

timing of construction with potential increased storm surge and flooding impacts to minority and/or low income communities. The DRPEIS does not fully describe the indirect and cumulative impacts on EJ issues. These communities have experienced negative impacts due to the BP oil spill, floods, hurricanes, and loss of subsistence fishing (including crabs, oysters, shrimp, etc), gathering, and hunting opportunities.

**Recommendation:**

In addition to our comments regarding obtaining a more accurate estimate of the demographics of the area, the USACE should consider the potential EJ impacts of the timing of levee construction on minority and/or low income populations that may be directly, indirectly, or cumulatively impacted by the proposed action. In order to avoid disproportionate impacts to the Isle de Jean Charles tribal community, any buyout would need to relocate the community intact in an appropriate location with access to subsistence resources and with other attributes agreeable to the tribe. The tribal leader should be contacted immediately to begin appropriate discussions. Although not mentioned in the DRPEIS, USACE should also determine whether the Point au Chien Indian Tribe and United Houma Nation would experience similar potential impacts. As discussed in our Cumulative Impacts comments on page 9, the FRPEIS should include a more thorough cumulative impacts analysis and include those impacts on minority and/low income populations.

6.15 Cultural Resources

The DRPEIS does not provide enough information to determine whether the USACE is in full compliance with National Historic Preservation Act (NHPA), E.O. 12898, and others.

**Recommendation:**

The USACE should initiate consultation with Tribes regarding NHPA and initiate formal consultation with any federally-recognized Tribes under E.O. 13175 before finalizing the EIS.

6.19 Mitigation

Table 4-1 of the Draft PAC Report includes a reference to marsh impacts from the levee which are “self mitigated”. It is not clear what this means, but it appears to be a reference to the idea that indirect hydrologic effects of the proposed levee project could provide wetland benefits that compensate for wetland impacts due to levee construction. EPA does not support such an assertion, given the uncertainties and challenges of accurately assessing hydrologic impacts from the levee, as well as the potential for long-term adverse impacts due to changes in the operation of the levee system in response to relative sea level rise.

Table 4-4 states that more than 3,000 acres of wetlands would be “displaced” by the preferred alternative. This wording suggests that fully compensating for wetland impacts is a simple endeavor with guaranteed success. We would suggest using more accurate wording such as “permanently eliminated” or “destroyed” instead of “displaced”, followed by the caveat that the USACE will seek to provide full compensatory mitigation to offset such impacts.

Page 6-71 of the DRPEIS states that “In most cases, the establishment of mitigation sites would be done at the same time as construction of the levees and other project features.” This statement is somewhat vague and may fall short of an explicit commitment to provide mitigation in advance of or concurrent with project implementation. For example, what is meant by “establishment of mitigation sites”? And what is meant by “In most cases...”? This statement should be re-written to include a commitment to provide mitigation in advance of or concurrent with project implementation, to the maximum extent practicable. This would ensure consistency with the standard for mitigation timing set forth in the April 10, 2008, Department of Defense and EPA regulations regarding compensatory mitigation for losses of aquatic resources. (According to Section 2036 of the Water Resources Act of 2007, the Secretary shall ensure that the mitigation plan for each water resource project complies with the mitigation standards and policies established pursuant to the regulatory programs administered by the Secretary.)

Mitigation efforts should be developed and described that avoid potential disproportionate impacts of the proposed action that could result in the loss of community cohesion in all of the potentially affected communities south of the proposed levee system, in particular, the tribal community of Biloxi-Chitimacha on Isle de Jean Charles.

## **8.0 PUBLIC INVOLVEMENT**

### **8.1 Scoping and Interagency Coordination**

It appears that the latest project scoping meetings took place in and around May of 1993 in Houma, Louisiana. There is not enough information to determine whether the USACE completed any more recent scoping and other public meetings besides the meeting held in January 2013, and whether communities, tribes, and other stakeholders directly regarding the project were contacted. EPA is concerned that the USACE did not obtain the views and ideas of affected residents and general public when the last record of communication and public involvement occurred almost 20 years ago.

#### **Recommendation:**

The FRPEIS should provide documentation of recent scoping and public involvement events and actions. If scoping and public involvement did not take place for this revised action, the USACE should directly and immediately engage all interested, concerned, and affected stakeholders, including low income, minority, and tribal populations, including the Biloxi-Chitimacha tribal community of Isle de Jean Charles, Point au Chien Indian Tribe, and United Houma Nation, before finalizing the EIS.

EPA emphasizes that there is a need for continued interagency coordination on the constructible and programmatic features of the proposed project to ensure that wetland impacts are avoided and minimized in the subsequent NEPA processes. This is particularly the case for those levee reaches that would enclose wetland areas that are currently un-impounded and new portions of the overall levee alignment (e.g., the proposed Lockport to Larose Ridge levee extension).